IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (currently amended) A data transfer apparatus for connecting a plurality of buses and for transmitting data ~~transferred~~ through ~~its own bus~~ a first one of the plurality of buses ~~among the buses to another~~ to a second one of the plurality of buses, ~~bus among the buses~~ according to destination information ~~attached~~ related to the data, comprising:

~~transmitting~~ means for determining, according to the destination information, whether ~~the~~ a node serving as a destination of the data is connected to ~~one~~ the second one of the buses[,];

wherein, when ~~it~~ the means for determining determines that the node is not connected, a data transmission source receives a predetermined error information signal; ~~and~~

~~wherein at least one packet of data is transmitted in an asynchronous mode independent of a routing table~~

wherein at least one packet of the data, transmitted to the node that is not connected, is processed as an error packet; and

wherein the destination information comprises a node ID and a bus ID.

2. (currently amended) The data transfer apparatus according to claim 1, wherein the ~~transmitting~~ means for determining determines, according to the destination information, whether the bus to which the node serving as the destination of the data is connected exists on a network, and

wherein when the bus does not exist, transmits predetermined error information to the data transmission source.

3. (previously presented) The data transfer apparatus according to claim 1, wherein the data transfer apparatus is connected to another bus through a second data transfer apparatus, and

wherein the data transfer apparatus further comprises transfer means for transferring the data from the data transfer apparatus to the second data transfer apparatus according to the destination information.

4. (previously presented) The data transfer apparatus according to claim 1, wherein the data transfer apparatus is formed of an IEEE-1394 bridge conforming to the BRAN specification.

5. (currently amended) A network system comprising:

a plurality of buses connected through a data transfer apparatus, the data transfer apparatus for connecting the plurality of buses and for transmitting data transferred through its own bus among the plurality of buses to another bus among the plurality of buses according to destination information attached to the data,

wherein the data transfer apparatus further comprises:

~~transmitting~~ means for determining, according to the destination information, whether a node serving as a destination of the data is connected to a second one of the plurality of buses, and, when it determines that the node is not connected, a data transmission source receives a predetermined error information;

~~wherein at least one packet of data is transmitted in an asynchronous mode independent of a routing table~~

wherein at least one packet of the data, transmitted to the node that is not connected, is processed as an error packet; and

wherein the destination information comprises a node ID and a bus ID.

6. (currently amended) The network system according to claim 5, wherein the ~~transmitting~~ means for determining determines according to the destination information whether the bus to which the node serving as the destination of the data is connected exists on a network, and,

when the bus does not exist, transmits predetermined error information to the data transmission source.

7. (currently amended) The network system according to claim 5, wherein the data transfer apparatus is connected to ~~a~~ the second bus through a second data transfer apparatus, and

the data transfer apparatus further comprises transfer means for transferring the data from the data transfer apparatus to the second data transfer apparatus according to the destination information.

8. (previously presented) The network system according to claim 5, wherein the data transfer apparatus is formed of an IEEE-1394 bridge conforming to the BRAN specification.

9. (currently amended) A data transfer method for a data transfer apparatus for connecting buses and for transmitting data transferred through a first bus among the buses to a second bus among the buses according to destination information attached to the data, the data transfer method comprising:

a first step of determining, according to the destination information, whether the node serving as a destination of the data is connected to one of the buses; and

a second step of, when it is determined that the node is not connected, transmitting predetermined error information to a data transmission source;

~~wherein at least one packet of data is transmitted in an asynchronous mode independent of a routing table~~

wherein at least one packet of the data, transmitted to the node that is not connected, is processed as an error packet; and

wherein the destination information comprises a node ID and a bus ID.

10. (previously presented) The data transfer method according to claim 9, wherein, in the second step, it is determined according to the destination information whether the

bus to which the node serving as the destination of the data is connected exists on a network, and,

when it is determined that the bus does not exist, predetermined error information is transmitted to the data transmission source.

11. (previously presented) The data transfer method according to claim 9, wherein the data transfer apparatus is connected to the second bus through a second data transfer apparatus, and the data is transferred from the data transfer apparatus to the second data transfer apparatus according to the destination information.

12. (previously presented) The data transfer method according to claim 9, wherein the data transfer apparatus is formed of an IEEE-1394 bridge conforming to the BRAN specification.